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KINDER MORGAN 5880 NW ST HELENS RD

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PORTLAND OR 97210

Material Safety Data Sheet

and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name

FORMULA 50

Product Code

0859

Date of issue 04/14/03

Version

1.0

Product Use

General Purpose Cleaner

Supersedes 03/26/01

Numbers

Emergency Telephone For MSDS information:

Acuity Specialy Products Group, Inc.

Compliance Services 1-877-I-BUY-ZEP

For Medical Emergency:

INFOTRAC

(877) 541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency:

CHEMTREC

(800) 424-9300 - All Calls Recorded

In the District of Columbia (202) 483-7616

Prepared by

B363

Compliance Services Group

Acuity Specialty Products Group 1420 Seaboard Industrial Blvd.

Atlanta, GA 30318

Name of Hazardous Ingredients	CAS#	% by Weight	Exposure Limits
ETHYLENE GLYCOL MONOBUTYL ETHER; butyl cellosolve	111-76-2	1-5	ACGIH TLV (United States). Skin TWA: 20 ppm Form: Vapor OSHA PEL (United States). Skin TWA: 25 ppm Form: Vapor
2) SODIUM METASILICATE; silicic acid (H2-Si-O3) disodium salt; water glass	6834-92-0	1-5	OSHA (United States). : 2 mg/m ³ Form: Dust
3) SODIUM DODECYLBENZENE SULFONATE; linear alkyl aryl sodium sulfonate	25155-30-0	15	Not available.

Section 3. Hazards Identification

Acute Effects

Routes of Entry Dermal contact. Eye contact. Inhalation. Ingestion.

Skin

Slightly hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

ire Hazard

Personal

Protection

HMIS

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Eves

Hazardous in case of eye contact (irritant). Liquid in eye may cause irritation with possible damage if not

rinsed immediately. Medical Conditions Aggravated by Overexposure: Eye

Hazardous in case of inhalation. May cause respiratory tract irritation. Medical Conditions Aggravated by

Overexposure: Respiratory

Ingestion

Inhalation

Not considered to be toxic for humans. However, in light of good industrial hygiene, exposure to any chemical should be kept to a minimum.

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects

The substance may be toxic to blood, kidneys, liver. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact

Skin Contact Inhalation

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. In case of contact, immediately flush skin with plenty of water. If irritation persists, seek medical attention. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get

medical attention if symptoms appear.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point

Not applicable.

Flammable Limits Not applicable.

Flammability

Aqueous solutions are non-flammable.

Fire Hazard Fire-Fighting Procedures

Not applicable.

Wear special protective clothing and positive pressure, self-contained breathing

apparatus.





MATERIAL SAFETY DATA SHEET

NOTICE

Thank you for your interest in, and use of, this product. Acuity Specialty Products Group is pleased to be of service to you by supplying this Material Safety as Sheet for your files. Acuity Specialty Products Group is concerned for your health and safety. This product and all others supplied by Acuity Specialty Products Group companies can be used safety with proper protective equipment and proper handling practices consistent with label instructions and the MSDS. Before using any this product, be sure to read the complete label and the Material Safety Data Sheet.

As a further word of caution, Acuity Specialty Products Group wishes to advise that serious accidents have resulted from the misuse of "emptied" containers. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, or other sources of ignition; they may explode or develop harmful vapors and possibly cause injury or death. Clean empty containers by triple rinsing with water or an appropriate solvent. Empty containers must be sent to a drum reconditioner before reuse.

TERMS AND ABBREVIATIONS Listed Alphabetically by Section

SECTION II: HAZARDOUS INGREDIENTS

CAR: Carcinogen - A chemical listed by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or OSHA as a definite or possible human cancer causing agent.

CAS#: Chemical Abstract Services Registry Number - A universally accepted numbering system for chemical substances.

CBL: Combustible - At temperatures between 100°F and 200°F chemical gives off enough vapor to ignite if a source of ignition is present as tested with a closed cup tester.

CNS: Central Nervous System depressant that reduces the activity of the brain and spinal cord.

COR: Corrosive - Causes irreversible injury to living tissue (e.g. burns).

DESIGNATIONS: Chemical and common names of hazardous ingredients.

EIR: Eye Irritant Only - Causes reversible reddening and/or inflammation of eye tis-

EXPOSURE LIMITS: The time weighted average (TWA) airborne concentra-1 at which most workers can be exposed without any expected adverse ef-15. Primary sources include ACGIH TLVs, and OSHA PELs.

ACGIH: American Conference of Governmental Industrial Hygienists CEILING: "The concentration that should not be exceeded in the workplace during any part of the working exposure." Source, ACGIH

OSHA: Occupational Safety and Health Administration.

PEL: Permissible Exposure Limit - A set of time weighted average exposure values, established by OSHA, for a normal 8-hour day and a 40-hour work-week.

PPM: Parts per million - unit of measure for exposure limits.

(S) SKIN: Skin contact with substance can contribute to overall exposure. STEL: Short Term Exposure Limit - Maximum concentration for a continuous 15-minute exposure period.

TLV: Threshold Limit Value - A set of time weighted average exposure limits, established by the ACGIH, for a normal 8-hour day and a 40-hour workweek.

FBL: Flammable - At temperatures under 100°F, chemical gives off enough vapors to ignite if a source of ignition is present as tested with a closed cup tester. HAZARDOUS INGREDIENTS: Chemical substances that are determined to be potential health or physical hazards based on the criteria established in the OSHA Hazard Communication Standard - 29 CFR 1910.1200

HTX: Highly toxic - the probable lethal dose for a 70 kg (150 lb.) man, which may be approximated as less than 6 teaspoons (2 tablespoons)

IRR: Irritant - Causes reversible effects in living tissues (e.g. inflammation) - primarily skin and eyes.

N/A: Not Applicable - Category is not appropriate for this product.

N/D: Not Determined - Insufficient information to make a determination for this item.

RTECS#: Registry of Toxic Effects of Chemical Substances - an unreviewed listing of published toxicology data on chemical substances.

SARA: Superfund Amendment and Reauthorization Act - Section 313 designates certain chemicals for possible reporting for the Toxic Chemical Release Inventory. SEN: Sensitizer - Causes allergic reaction after repeated exposure.

TOX: Toxic - The probable lethal dose for a 70 kg (150 kg) man is one ounce ablespoons) or more.

SECTION III: HEALTH HAZARD DATA

ACUTE EFFECT: An adverse effect on the human body from a single exposure with symptoms developing almost immediately after exposure or within a relatively short time.

CHRONIC EFFECT: Adverse effects that are most likely to occur from repeated exposure over a long period of time.

EST'D PEL/TLV: This estimated, time-weighted-average, exposure limit, developed by using a formula provided by the ACGIH, pertains to airborne concentrations from the product as a whole. This value should serve as guide for providing safe workplace conditions to nearly all workers.

HMIS CODES: Hazardous Material Identification System - a rating system developed, by the National Paint and Coating Association for estimating the hazard potential of a chemical under normal workplace conditions. These risk estimates are indicated by a numerical rating given in each of three hazard areas (Health/ Flammability/Reactivy) ranging from a low of zero to a high of 4. The presence of a chronic hazard is indicated by a "YES". Consult HMIS training guides for Personal Protection letter codes, which indicate necessary protective equipment.

PRIMARY ROUTE OF ENTRY: The way one or more hazardous ingredients may enter the body and cause a generalized systemic or specific-organ toxic effect.

ING: Ingestion - A primary route of exposure through swallowing of material.

INH: Inhalation - A primary route of exposure through breathing of vapors. SKIN: A primary route of exposure through contact with the skin.

SECTION IV: SPECIAL PROTECTION INFORMATION

Where respiratory protection is recommended, use only MSHA and NIOSH approved respirators and dust masks.

MSHA: Mine Safety and Health Administration

NIOSH: National Institute for Occupational Safety and Health.

SECTION V. PHYSICAL DATA

EVAPORATION RATE: Refers to the rate of change from the liquid state to the vapor state at ambient temperature and pressure in comparison to a given substance (e.g. water).

pH: A value representing the acidity or alkalinity of an aqueous solution (Highly Acidic pH = 1; Neutral pH = 7; Highly Alkaline pH = 14)

VOC CONTENT: The percentage or amount in pounds per gallon of the product that is regulated as a Volatile Organic Compound under the Clean Air Act of 1990 and various state jurisdictions.

SOLUBILITY IN WATER: A description of the ability of the product to dissolve in water.

SECTION VII: REACTIVITY DATA

HAZARDOUS DECOMPOSITION: Breakdown products expected to be produced upon product decomposition by extreme heat or fire.

INCOMPATIBILITY: Keep product away from listed substances or conditions to prevent hazardous reactions.

POLYMERIZATION: Indicates the tendency of the product's molecules to combine with themselves in a chemical reaction releasing excess pressure and heat. STABILITY: Indicates the susceptibility of the product to decompose spontaneously and dangerously.

SECTION VIII: SPILL AND DISPOSAL PROCEDURES

RCRA WASTE NOs: RCRA (Resource Conservation and Recovery Act) waste codes (40 CFR 261) applicable to the disposal of spilled or unusable product from the original container.

SECTION X: TRANSPORTATION DATA

CWA: Clean Water Act - Federal law that regulates chemical releases to bodies of water.

RQ: Reportable Quantity - The amount of the specific ingredient that, when spilled to the ground and, can enter a storm sewer or natural watershed, must be reported to the National Response Center, and other regulatory agencies.

TSCA: Toxic Substances Control Act - A federal law requiring all commercial chemical substances to appear on an inventory maintained by the EPA.

DISCLAIMER

All statements, technical information, and recommendations contained herein are based on available scientific tests or data that we believe to be reliable. The accuracy and completeness of such data are not warranted or guaranteed. We cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used. Acuity Specialty Products Group assumes no liability or responsibility for loss or damage resulting from the improper use or handling of our products, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the product label and Material Safety Data Sheet

(rev 06/02)